

Water System ID #TX1010027



## Where to Get More Information

When requesting information about the City of West University Place's water system, use our number (TX1010027), which is the number assigned to our water system by the U.S. Environmental Protection Agency (EPA).

Visit the EPA's water information site at www.epa.gov/safewater/.

You may also call the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Water quality data for community water systems throughout the U.S. is available on the Internet at <a href="https://www.waterdata.com">www.waterdata.com</a>. Previous years' water quality reports for the City of West University Place are available at <a href="https://www.westu.org">www.westu.org</a>.

You are welcome to contact Patrick Walters, Operations Superintendent for the City of West University Place, with questions about your water. He may be reached at 713-662-5858 or PWalters@westu.org.

#### En Español

Este reporte incluye informacion importante sobre el agua para tomar. Si tiene preguntas o discusiones sobre este reporte, favor de llamar al tel. 713-662-5846 para hablar con una persona bilingue en español.

# In **2009**, your water quality surpassed all state and federal requirements for drinking water.

#### How and Why We Test Your Water

#### Testing frequency

The City of West University Place tests your water daily, weekly, monthly, quarterly, yearly, and at greater intervals for as many as 97 constituents. In 2009, we performed 3,231 individual tests on your water. Testing intervals are determined by state and federal regulatory agencies. The purpose of testing is to make sure your water quality remains within safe levels as determined by the U.S. Environmental Protection Agency (EPA).

#### Who tests the water

Technicians who are licensed by the Texas Commission on Environmental Quality (TCEQ) collect water samples from wells, storage facilities, points in the distribution system, and residents' homes. Much of our testing is done in the field, although some samples are sent to a state-licensed laboratory for analysis.

#### What we test for

In general, we test for the following substances: biological (such as viruses and bacteria); inorganic (such as salts and metals); organic (such as chemicals from industrial or petroleum use); radioactive, which occur naturally or result from oil/gas production and mining activities; and pesticides and herbicides. The tests also check levels or inorganic ions (nitrate, nitrite, fluoride, phosphate, sulfate, chloride and bromide) that are essential for human health in small quantifies, but which in larger quantities can cause unpleasant taste and odor—or even illness.

#### How substances enter the water

As rain and other water travels over land and sinks through the ground into aquifers, the water dissolves certain naturally occurring minerals, and breaks down naturally occurring radioactive materials. This water may also pick up dissolved substances resulting from the presence of plants, animals or human activity.

#### Who sets the regulations

To ensure that your water is safe to drink, the U.S. EPA regulates tap water, and the U.S. Food and Drug Administration (FDA) regulates bottled water. Drinking water—including bottled water—may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

You may get more information about drinking water standards and the potential health effects of water constituents by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

#### **Test Results**

The water provided by the City of West University Place met or surpassed all state and federal requirements for drinking water in 2009. There were no violations of the federal Safe Drinking Water Act.

The table on the facing page shows the results of our water-quality analyses. Every contaminant we detected in the water—even in the minutest traces—is listed here. The table contains the name of each substance and the amount detected, together with numbers that show the highest level allowed by regulation (MCL) and the ideal goal for public health (MCLG).

While we did see a presence of volatile organic contamination (listed on the chart under "Disinfection Byproducts"), this is a by-product of disinfecting the water with chlorine. Chlorine is still the most-accepted and best-available technology for disinfecting drinking water.

#### **YOUR WATER SOURCE**

Your water in 2009 was a blend of 50% groundwater and 50% surface water.

The groundwater comes from two water wells owned and operated by the City of West University Place. The wells pump water from about 560 feet down, drawing from the Evangeline Aquifer located in the Gulf Coastal Sands.

The surface water is purchased from the City of Houston's East Water Purification Plant #3. Because the City of Houston draws some of its water from surface sources (e.g. lakes or reservoirs), it tests regularly for cryptosporidium, a pathogen that causes a diarrheal illness. No cryptosporidium was found in the City of Houston's drinking water

According to the City's Source Water Assessment (2006 completion), "Our source waters' contamination opportunities are rare and protection levels are high."

TEST RESULTS													
Meets/Exceeds Quality Standard	Constituent, Unit of Measurement		Test Date	Detected Level	Range	Regulatory Limit	(MCL)	Regulatory Limit Goal (MCLG)	Likely Sources of Constituent				
	INORGANIC												
~	Chloride, ppm		2008*	34.0	34.0 – 34.0	0 300	0 300		Erosion of natural deposits				
<b>~</b>	Fluoride, ppm		2008*	0.73	0.73			4.0		Erosion of natural deposits; water additive to promote discharge from fertilizer and aluminum factories			
~	Nitrate, ppm		2009	0.02	0.02 0.2 – 0.2 (test 1)		0	10.0	Runoff from fertilizer use; leaching from septic tanks & sewage; erosion of natural deposits				
~	Nitrite, ppm		2006*	0.385	0.02 – 0.26			1.0	Runoff from fertilizer use; leaching from septic tanks & sewage; erosion of natural deposits				
~	Sulfate, ppm	Sulfate, ppm		66.0	66.0 – 66.0		)			Erosion of natural deposits			
	DISINFECTION BYPRODUCTS												
~	Free Chlorine		2009	0.68 0.22 – 2.04		4 MF	RDL-4 MRDLG-4		Water additive used to control microbes				
•	THAAs (Total Haloacetic Acids), ppb		2009	22.2 11.6 – 22.2		2 60	0		By-product of drinking water chlorination				
~	TTHMs (Total Trihalomethane), ppb		2009	29.5	4.0 – 29.5	80	0		By-product of drinking water disinfection				
~	Chloramine, ppm				. 0.5 – 3.8	MF	DL-4	MRDLG-4	Water additive used to control microbes				
	UNREGULATED**												
N/A	Bicarbonate		2008	233	117.0 – 23	– 233.0 N/A		N/A	By-product of drinking water disinfection				
N/A	Bromochloroacetic Acid, ppb		2009	6.6 3.27 – 6.		N/A	4	N/A	By-product of drinking water disinfection				
N/A	Bromodichloromethane, ppb		2009	12.6 6.06 – 12.6		6 N/	4	N/A	By-product of drinking water disinfection				
N/A	Chloroform, ppb		2009	16.9	16.9 4.5 – 16.9		N/A N/A		By-product of drinking water disinfection				
N/A	Dibromochloromethane, ppb		2009	4.9	4.9 2.36 – 4.9		A	N/A	By-product of drinking water disinfection				
N/A	Dichloroacetic Acid		2009	15.5 7.45 – 15.5		5 N/A	4	N/A	By-product of drinking water disinfection				
N/A	Trichloroacetic Acid		2009	4.9 2.75 –		9 N/A		N/A	By-product of drinking water disinfection				
N/A	Dibromoacetic Acid		2009	1.8	1.2 – 1.8	N/A	4	N/A	By-product of drinking water disinfection				
	TURBIDITY							( )22	- 10				
<b>V</b>	Turbidity, NTU (cloudiness); reflects content of City of Houston surface water		2009	0.11 – Avg	0.04 – 0.4	0.04 – 0.43 1.0		*Your		Soil runoff. See "Additional Health Information," next page. Your water contains even less turbidity, since it is diluted 50% by well water with no substantive turbidity.			
					COPPE	ER A	ND	LEA	D				
ırd				6)									
Meets/Exceeds Quality Standard	Substance	Test Date	# Samples	90th Percentile	Action Level (AL)	Number of test sites exceeding Action Level (AL)	Source of Contaminant						
V	Copper, mg/L	2007*	30	0.233	1.3	0		orrosion of household plumbing systems; erosion of natural deposits; leaching from					
~	Lead, ppb	2007* 30 3.4 15 0				0	Corrosion of household plumbing systems; erosion of natural deposits. See "Additional Health Information," to the right						
				C	OLIFOR	RM F							
COLIFORM BACTERIA													
Meets/Exceeds Quality Standard	Microbiological Contaminants Highest # of detections					# of months in violation	MCL	Violation  MCLG  Source of Contaminant			Source of Contaminant		

0

Total Coliform Bacteria

1 positive sample in each of 3 different months; repeat test did not show positive

No

More than 1 sample in a month with a detection

0

Naturally present in the environment

#### INFORMATION FOR TEST RESULTS

- \* These test dates reflect the most recent testing done in accordance with regulations.
- \*\* The City of West University Place is participating in gathering data under the Unregulated Contaminant Monitoring Rule (UCMR) to help the EPA in determine the occurrence of possible drinking water contaminants. If unregulated contaminants were detected, they are shown in this table. This data may also be found on EPA's website at http://www.epa.gov/safewater/data/ncod.html, or you can call the Safe Drinking Water Hotline at 1-800-426-4791

#### **KEY**

ppb Parts per billion

Parts per million ppm

MCL Maximum Contaminant Level - the highest level of a

contaminant that is allowed in drinking water. MCLs are set as low to the goals as feasible using the best available treatment

technology.

**MCLG** Maximum Contaminant Level Goal – The level of a contaminant

in drinking water, below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDI Maximum Residual Disinfectant Level

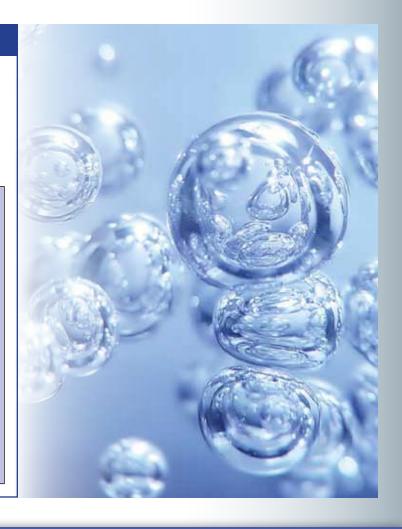
MRDLG Maximum Residual Disinfectant Level Goal

AL Action Level - The concentration of a contaminant, which if

exceeded, triggers treatment or other requirement that a water

system must follow.

NTU Nephelometric Turbidity Units – a measurement of particles in





How to Get Involved We encourage public interest and participation in our community's decisions affecting drinking water. The public is welcome at regular City Council Meetings, which occur the 2<sup>nd</sup> and 4<sup>th</sup> Mondays of each month at 6:30 p.m. at the Municipal Building, 3800 University Blvd., City of West University Place. Get more information about these meetings at www.westu.org or by calling 713-662-5839.

#### Additional Health Information

#### Immune system disorders

Some people may be more vulnerable than others to constituents in drinking water. Immuno-compromised persons such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek drinking water advice from their health care providers.

#### Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. When your water has been sitting in the water lines for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Call the Safe Drinking Water Hotline (1-800-426-4791) for more information, or search at http://www.epa.gov/safewater/lead.

#### Turbidity

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. The organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

What Goes in the Gutter, Goes in the GULF.

Our storm sewers flow to the Gulf of Mexico.

STOP

Dumping oil, paint, pesticides and herbicides in the gutters.

TELL

Lawn workers to bag and remove leaves—not blow them into drains.

REPORT

Construction workers who pollute waterways with dirty jobsites.

To report violations or ask questions, call 713.662.5839 or contact Public Works at: pwalters@westu.org

Review our Storm Water Pollution Prevention Plan at: www.westu.org



# Save Water, Save Energy

Information in the following article is sourced from the US Environmental Protection Agency (EPA), www.epa.gov/watersense/

It takes a lot of energy to deliver and treat your water. Public water supply and treatment facilities in America consume about 56 billion kilowatt-hours (kWh) per year – enough electricity to power 5 million+ homes each year.

Your choices affect these statistics.

When you choose a toilet or faucet (repairs, remodeling, new construction), look for those labeled "WaterSense" (see logo below). These fixtures use at least 20 percent less water. In 2008 alone, WaterSense-labeled toilets and faucets helped save more than 9.3 billion gallons of water. Worth noting: those consumers also saved more than \$55 million in water and sewer bills.

A faucet **left running for five minutes** uses about as much energy as letting a 60-watt light bulb run for **14 hours**.

Your actions DO make a difference. Help keep our gutters clean. They flow to the Gulf of Mexico, where they impact sea life and fishery quality. This year, resolve to make two small changes:

One, don't allow yard workers to blow leaves and trimmings into the street and gutters. Use lawn waste for mulch or compost, or bag it and leave it on the curb for collection.

Two, encourage your children to pick up trash around the schools and parks. Lead by example. This can be part of your "do a good turn daily" practice.

For more information or to report storm sewer dumping, contact the Public Works Department at **713.662.5839** or <a href="mailto:pwalters@westu.org">pwalters@westu.org</a>. To see our City's Storm Water Pollution Prevention Plan, go to <a href="https://www.westu.org">www.westu.org</a>.

The United Nations Environment Program estimated in 2006 that every square mile of ocean hosts 46,000 pieces of floating plastic. In some areas, the amount of plastic outweighs the amount of plankton by a ratio of six to one.

Source: http://science.howstuffworks.com/great-pacific-garbage-patch.htm





Look for this label when you shop. It identifies a waterefficient product that has been independently tested and certified to meet EPA WaterSense criteria for efficiency and performance.





Receive emergency communications via the City's free high-speed telephone service.

Sign up at: www.westu.org

TCC/TTY service available for the hearing impaired.





### Tips for watering during a drought:

- 1. Use soaker hoses, drip irrigation, or hand-held hoses. Overhead sprinklers don't deliver as much water to plant roots, and chronic wet foliage attracts disease and pests.
- **2. Try a long-handled spray nozzle** when hand-watering. It creates raindrop-sized droplets and delivers them near plant roots, helping avoid runoff.
- 3. Apply survival-level water every three days when it hasn't rained, to recharge the soil water.
- **4. Don't water daily,** especially on heavy clay soils. One or two deep waterings are much better than many shallow or light waterings. Shallow watering encourages shallow roots, which in turn makes the tree even more prone to drought stress.
- **5. Remove all grass around young trees** (one foot beyond drip line). Young trees are particularly susceptible to water competition from turf grass. Mulch helps protect bare soil areas.

Source: WalterReeves.com